From: Christopher Hoess
To: Microsoft ATR
Date: 1/26/02 11:06pm
Subject: Microsoft Settlement

## Greetings,

Having reviewed the Revised Proposed Final Judgement against Microsoft Corporation at <URL:http://www.usdoj.gov/atr/cases/f9400/9495.htm>, I feel as a consumer and developer of software products, and a producer of electronic documents, in the areas affected by the anticompetitive practices of the Microsoft Corporation, that the Revised Proposed Final Judgement does not offer an adequate remedy for the effects of those practices.

Specificially, the original complaint against the Microsoft Corporation was made with regard to their attempts to eliminate competition in the web browser market. I feel that the current judgement has not sufficiently redressed the damage done to the World Wide Web, and furthermore, is not necessarily sufficient to prevent the Microsoft Corporation from continuing to monompolize that market. My reasons are as follows:

1) Many guidelines exist for the creation of electronic documents to be distributed over the World Wide Web, such as W3C Recommendations <URL:http://www.w3.org/TR/> and "Requests for Comment" issued by the IETF <URL:http://www.rfc-editor.org/>. In practice, different web browsers tend to implement these standards and recommendations in a "quirky" fashion, so that certain parts of these standards will be better implemented than others. In a robust browser market, content created for the World Wide Web will tend to incorporate only the parts of the standards which are supported by the majority of browsers. However, with the increasing dominance of Internet Explorer in the browser market, the content appearing there has shifted towards documents which are "optimized" for viewing by Internet Explorer. Furthermore, the appareance of some of these documents takes advantage of bugs in Internet Explorer, so that a correct implementation of the standards and recommendations will result in a degraded browsing experience. Because of the "poisoning" of web content created by this near-monoculture, alternative browsers will find it difficult to gain acceptance in the market even if Microsoft is barred from retaliating against OEMs shipping them, because current web content is essentially written to the undocumented behavior of Internet Explorer rather than current standards. I believe that Microsoft should be made to provide restitution for its takeover of the browser market, one component of which might be directed at this issue. To help redress the imbalance between Internet Explorer and other browsers due to the state of web content, an additional behavioral remedy should be to require Microsoft Middleware to respect standard protocols. To wit: Middleware such as Internet Explorer, which purports to implement "standard protocols" (that is, those defined by recognized consortia or

standards bodies, such as the ISO, ECMA, the IETF, the W3C, and so forth), should be forbidden to retain known and corrigible breaches of those standards (known in Internet Explorer, for instance, as "doctype switching") in new releases of these products. This would simultaneously diminish the unlawfully obtained ability of Internet Explorer to render current content on the web in a manner superior to current browsers, and increase the relevance of the publically available standards for web content.

2) More importantly, there appears to me to be a loophole in the current settlement which Microsoft could attempt to use to avoid losing its dominance through Internet Explorer. The Revised Proposed Final Judgement specifies that Microsoft is not required to divulge information which might "compromise the security of a particular installation". Currently, one important use of Internet Explorer on Windows operating systems is to obtain authenticated security patches from the Windows Update website <URL:http://windowsupdate.microsoft.com/> and install them. Microsoft could potentially argue that the authentication of patches and their automatic installation is protected information under that clause of the Revised Proposed Final Judgement, and thus require the installation of Internet Explorer to obtain such patches from the Internet. Since the timely installation of patches is essential for Internet-connected users, this would essentially require OEMs to ship Internet Explorer with the operating system. However, such security updates make use of a very small portion of the Internet Explorer functionality; contrast with the small utility programs "apt-get", "dselect", and "dpkg", used by the Debian distribution of the Linux operating system. Any Proposed Final Judgement should make provisions to avoid Microsoft bundling unnecessary Middleware by adding security-related functions to it, much as Internet Explorer was bundled into the Windows operating system.

In conclusion, I feel that the Revised Proposed Final Judgement would neither adequately make reparation for the damage inflicted by Microsoft's illicit acts, nor would it prevent Microsoft from continuing to maintain its current monopoly of the browser market in the face of reasonable competition.

Christopher Hoess